



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/721,356	11/22/2000	Martin C. Flautt	24854A	9978

22889 7590 10/24/2002

OWENS CORNING  
2790 COLUMBUS ROAD  
GRANVILLE, OH 43023

EXAMINER

THOMPSON, CAMIE S

ART UNIT	PAPER NUMBER
----------	--------------

1774

DATE MAILED: 10/24/2002

8

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/721,356

Applicant(s)

FLAUTT ET AL.

Examiner

Camie S Thompson

Art Unit

1774

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 16-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

Art Unit: 1774

### **DETAILED ACTION**

1. Applicant's amendments and accompanying remarks filed on July 9, 2002 have been acknowledged.

2. Newly submitted claims 16-20 directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: Claims 16-20 are directed towards a string binder.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 16-20 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

3. The examiner acknowledges that a new oath/declaration has been submitted on July 9, 2002 with residence and mailing address of each inventor.

4. The objection to claims 14 and 15 for being improper multiple dependent claims is withdrawn.

### ***Election/Restrictions***

5. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-15, drawn to reinforcing fibers, classified in class 428, subclass 392.

II. Claims 16-20, drawn to a string binder, classified in class 242, subclass 157 R<sup>+</sup>.

The inventions are distinct, each from the other because of the following reasons:

Art Unit: 1774

6. Inventions I and II are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate product is deemed to be useful as a reinforcing laminate and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

7. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

8. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

9. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the

Art Unit: 1774

application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

### ***Claim Objections***

10. Claims 1-15 are objected to because of the following informalities: Claims 2-15 are dependent on claim 1 which refers to reinforcing fibers and not the “product”. The examiners suggests deleting the word “product” in claims 2-15 and add the phrase “reinforcing fibers”. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter that the applicant regards as his invention.

12. Claims 3, 8 and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

13. Claim 3 contains the trademark/trade name PE412. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte*

Art Unit: 1774

*Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify is used to identify/describe an emulsified polyester.

14. Claim 8 contains the trademark/trade name Duracet 675-01. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify is used to identify/describe a vinyl polymer.

15. Claim 11 contains the trademark/trade names Carbopol 941 and Carbopol 981. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods

Art Unit: 1774

associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify is used to identify/describe an acrylic polymer.

***Claim Rejections - 35 USC § 102***

16. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

17. Claims 1-2, 6-7 and 12-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Dana et al., U.S. Patent Number 5,908,689.

Dana discloses reinforcing fibers such as glass fiber strands wherein an aqueous chemical treatment, which is dried, is applied to the fibers as per instant claims 1, 2 and 13 (see column 4, lines 1-17). Dana also discloses that the aqueous chemical treatment comprises an emulsified polyester resin, a curing agent a film former, a thickener and water as per instant claim 1 (see column 4, lines 23-28; column 5, lines 31-37; column 6, lines 67-68; column 7, line 24; column 15, lines 39-40 and Table 3). Additionally, the Dana reference discloses that the film former is a vinyl polymer such as polyvinyl acetate as shown in column 4, lines 24-28 and Table 2 as per instant claims 6 and 7. Deionized water is disclosed in the reference in column 7, line 24 as per instant claim 12. A reinforcing mat comprising reinforcing fibers that form a strand having an applied chemical treatment is disclosed as per instant claim 14 (see Dana reference claims 1-12). A reinforced polymeric composite is disclosed as comprising a thermosetting matrix material and

Art Unit: 1774

a reinforcing mat that is claimed in instant claim 14 as shown by the reference in column 14, lines 54-62.

***Claim Rejections - 35 USC § 103***

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

19. Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Temple, U.S. Patent No. 5,130,197 in view of Eichhorn et al., U.S. Patent No. 4,596,736 and in further view of The Manufacturing Technology of Continuous Glass Fibers, (3<sup>rd</sup> Edition, 1993).

The Temple reference discloses a chemically treated fibrous substrate such as glass reinforced fiber strands wherein the applied treatment is dried as per instant claims 1 and 2 (see abstract).

The reference also discloses that the applied chemical treatment comprises an emulsified polyester resin, a film former of polyvinyl acetate and deionized water as per instant claims 1,3 and 6-12 (see column 6, lines 52-68, column 7, lines 37-41 and column 9, line 49). The reference does not disclose using a thickener, PE412 as the emulsified polyester resin or Duracet 675-01 as the film former as per instant claims 3 and 8. It would have been obvious to one of ordinary skill in the art to use PE412 and Duracet 675-01, as they are well known in the art as emulsified polyester resin and polyvinyl acetate respectively widely used for chemical treatment of glass fibers.



• Art Unit: 1774

Temple does not disclose using peroxide as a curing agent or using a thickener as in instant claims 1 and 4-5. However, Eichhorn teaches chemically treated fibers wherein the treatment comprises an organic emulsified resin film former (see column 4). Eichhorn also teaches that thickeners and crosslinking agents such as dicumyl peroxide may be used (see column 5, 25-29). Although, neither Temple nor Eichhorn disclose using an acrylic polymer as a thickener, acrylic polymers are well known in the art as thickeners as shown by The Manufacturing Technology of Continuous Glass Fibers, (3<sup>rd</sup> Edition, 1993). B.F. Goodrich manufactures Carbopol 941 and 981 as acrylic polymers. Therefore, it would have been obvious to one of ordinary skill in the art to use Carbopol 941 and 981 as thickeners so as to adjust the viscosity of the chemical treatment composition. A lower viscosity allows the glass fibers to be wetted without the need for solvent and solvent vapors.

Temple discloses chemically treated glass fibers as strands for reinforcing polymeric matrices in producing plastics as in the form of a reinforcing mat or package as per instant claims 13-15 (see column 1, 10-24 and column 10, lines 21-30).

### ***Response to Arguments***

14. Applicant's arguments filed July 9, 2002 have been fully considered but they are not persuasive. The argument regarding claims 3, 8 and 11 concerning trademarks and trade names is not persuasive. Although applicant amended claims 3, 8 and 11, a trademark cannot be used in a claim as a limitation to identify or describe a particular material or product. Claims 3, 8 and 11

• Art Unit: 1774

do not comply with the requirement of 35 U.S.C 112, second paragraph. In addition, the use of trademarks or trade names renders the scope of claim indefinite. A trademark or trade name is used to identify a source of goods, and not the goods themselves.

The applicant's claim 1 states that the reinforcing fibers have an applied chemical treatment.

Applicant's further arguments are considered moot due to the new grounds of rejection.

The Temple and Eichorn reference both disclose a chemical treatment applied to glass reinforced fibers. Claim 1 is drawn to reinforcing fibers have an applied aqueous chemical treatment. The applicant's claim 1 does not make a distinction between an aqueous chemical treatment and a sizing composition. The Eichorn reference does disclose that thickeners and peroxides can be added to a chemical treatment used on glass fibers.

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Camie S. Thompson whose telephone number is (703) 305-4488. The examiner can normally be reached on Monday through Friday from 7:30 am to 4:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H. Kelly, can be reached at (703) 308-0449. The fax phone numbers for the Group are (703) 872-9310 {before finals} and (703) 872-9311 {after finals}.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0661.

CYNTHIA H. KELLY  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700

